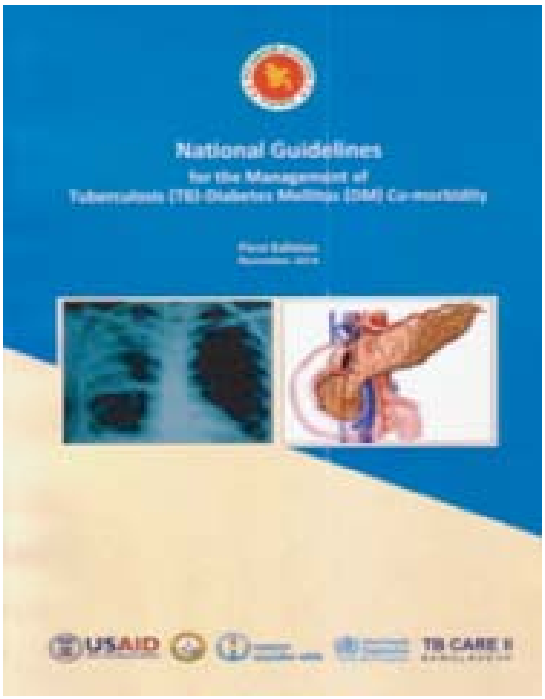
BIRDEM NEWS

(Birdem Med J 2015; 5(1): 56)



Tuberculosis (TB) and Diabetes Mellitus (DM) are two reciprocally related diseases and one can adversely affect the management of other. For a comprehensive management of TB-DM co-morbid patients, Bangladesh Diabetic Samity (BADAS) took an initiative under the name of BADAS-USAID TB CARE II Project, Bangladesh which started its activity in June 2013. As part of this activity around 1200 medical personnel including doctors, nurses, laboratory technicians and other hospital stuffs from BIRDEM and other affiliated centers of BADAS have been trained.

Another important objective of this project was to develop a national guideline on the management of TB-DM co-morbidity, under the guidance of National Tuberculosis Control Program of Bangladesh (NTP). It was a splendid effort of the BADAS-USAID TB CARE II Project Bangladesh, to develop this National Guidelines on Management of TB–DM co-morbidity, in the shortest possible time, the first edition of which is published in November 2014.

On the way to develop this national guideline, a number of workshops were held in BIRDEM with the participation of 49 clinicians & experts from different medical disciplines and

institutions (NTP, NIDCH, BSMMU, DMCH, National Kidney Foundation, ICDDRB, URC, IMC and BIRDEM). This guideline represents the joint & consensus effort of all the experts. This guideline is a pioneer & maiden effort in south-east Asia. The Guideline will provide information and guidance to health care professionals at different level of health care system so that TB-DM suffers can get a unique service.

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BIRDEM NEWS

(Birdem Med J 2015; 5(1): 57-60)

Microbiology

Bacteria and Antibiogram Report
January to June 2014 (Vol 5, No. 1, 2014)

Table-I

Pattern of organisms isolated from different samples

Organisms	Blood	Urine	Respiratory Secretions	Pus Wound	Total
Escherichia coli	64	1299	41	230	1634
Klebsiella sp	40	324	141	228	733
Acinetobacter sp	35	16	330	86	467
Pseudomonas sp	48	76	104	295	529
Staph aureus	12	62	44	351	469
Gr D Enterococcus sp	4	219	2	67	292
Gr D Non Enterococcus	1	42	-	9	52
Salmonella sp (Typhoid gr)	17	2	-	1	20
Proteus sp	-	4	1	257	262
Enterobacter sp	1	45	9	70	125
Candida sp	55	240	160	9	464
Streptococcus sp	-	81	-	21	102
Serratia marcesence	-	2	1	2	5
Providencia sp	-	-	2	-	2
Citobacter sp	5	43	2	34	84
Coagulase negative Staph	-	6	-	2	8
Morganella sp	-	-	-	1	1
Haemo philus sp	-	-	-	-	-
Streptococcus pneumoniae	1	-	2	-	3
Flavobacterium sp	1	2	1	-	4
Corynebacterium sp.	-	-	-	-	-
Burkholderia pseudomallei	-	-	-	-	-

Table-II

Major organisms isolated from outdoor, indoor, ICU and ICHRI patients

Organisms	Outdoor N=2181	Indoor N=2160	ICU N=772	ICHRI N=117	Total N=5230
Ecoli	789	761	56	18	1624
Klebsiella	304	322	96	10	732
Acinetobacter	54	71	296.	35	456
Pseudomonas	233	190	97	3	523
Staph aureus	256	173	30	8	467
Salmonella sp.	7	7	-	6	20
Gr DEnterococcus sp.	100	164	24	2	290
Gr DNon enterococcus	19	26	6	-	51
Candida sp.	18	254	155	34	461
Proteus sp.	178	80	3	1	262
Streptococcus sp.	66	38	1	-	105
Enterobacter sp	91	34	-	-	125
Citrobacter sp.	52	30	5	-	87
Coag NS	6	2	-	-	8
Serratia	2	3	-	-	5

Table-III

ABST attern of major Gram negative organisms isolated

Antibiotics	% Resistant				
	E. coli (N=1634)	Klebsiella (N=735)	Acinetobacter (N=469)	Pseudomonas (N=525)	Salmonella (N=20)
Imipenem	2.3	20.7	92.2	49.1	ND
Ceftriaxone	70.5	67.6	95.7	82.3	0
Ceftazidime	70.6	67.5	95.3	67.1	ND
Cefixime	72.4	68.3	97.6	92.5	0
Augmentin	82.1	82.1	96.6	94.9	ND
Piperacillin	-	-	88.9	36.2	ND
Tazo/piperacillin	16.0	40.6	93.4	18.8	ND
Amikacin	4.2	30.6	91.4	50.0	ND
Netilmicin	5.6	33.0	84.9	56.6	ND
Gentamicin	23.8	39.3	93.2	67.0	ND
Ci rofloxacin	70.4	55.1	93.8	52.2	0
Cotrimoxazole	55.7	56.6	68.9	74.6	31.6
Nitrofurantoin	8.5	46.5	93.3	97.2	ND
Colistin	4.8	1.4	0.9	12.2	ND
Nalidixic acid	ND	ND	ND	ND	72.2
Azithromycin	ND	ND	ND	ND	55.6
Chloramphenicol	6.5	45.0	97.1	72.3	35.3
Ampicillin	ND	ND	ND	ND	29.4

Table-IV

ABST pattern of major Gram positive organisms isolated

Antibiotics	% Resistant	
	Staph aureus N=470	Enterococcus (N=292)
Penicillin	ND	33.0
Amyicillin	ND	22.7
Oxacillin	30.3	ND
Cephalexin	31.4	ND
Augmentin	44.4	ND
Amikacin	8.2	57.6
Netimicin	3.2	44.3
Gentamicin	14.3	40.6
Nitrofurantoin	3.4	15.4
Rifampicin	5.3	ND
Fusidic acid	3.2	ND
Erythromicin	71.2	100
Vancomycin	0	0
Cotrimoxazole	18.1	97.6

ND=Not done

Table-V

ABST ABST pattern of major Gram negative organisms of ICU

Antibiotics	% Resistant			
	Ecoli (N=56)	Klebsiella (N=96)	Acinetobacter N=296)	Pseudomonas (N=97)
Imipenem	5.5	65.3	99.0	71.6
Ceftriaxone	94.6	99.0	99.3	90.7
Ceftazidime	94.3	98.8	99.3	73.3
Augmentin	96.3	98.9	99.0	97.9
Pi peracillin	-	-	100	44.4
Tazo/piperacillin	25.0	74.7	98.3	22.1
Amikacin	10.7	66.3	98.6	56.8
Netilmicin	11.3	77.7	96.3	71.1
Gentamicin	28.6	72.9	99.0	76.3
Ciprofloxacin	87.5	86.5	99.3	61.9
Cotrimoxazole	73.2	83.3	70.6	59.4
Colistin	3.6	1.1	0.3	35.2

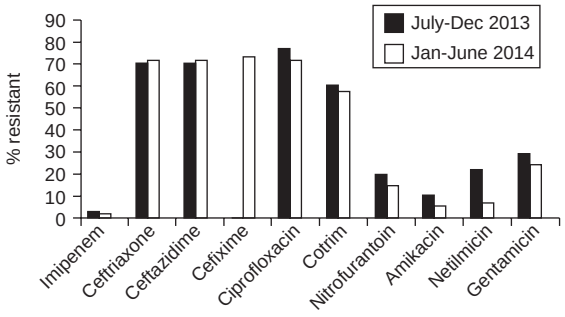
Table-VI

Multidrug resistant organisms isolated from various samples

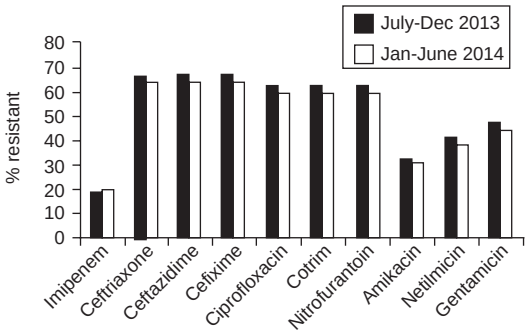
Organisms	Total isolated	Category of resistant organisms	N	%
Staph aureus	466	MRSA	141	30.3
Salmonella sp.	20	NARST	13	65
Ecoli	1634	ESBL	754	46.1
Klebsiella sp.	735	ESBL	182	24.8
Enterobacters sp	125	ESBL	26	20.8
Citrobacters sp	87	ESBL	25	28.7
Enterococcus sp.	292	VRE	0	0

ABST= Antibiotic sensitivity test; NARST=Nalidixic acid resistant S. typhi & S paratyphi; ESBL=Extended spectrum beta lactamase; VRE=Vancomycin Resistant enterococcus; ND = Not done

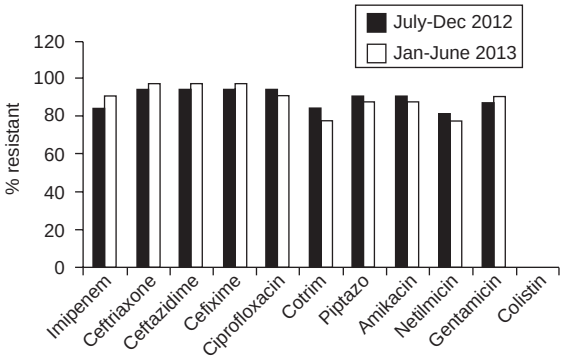
Comparative antibiotic resistance pattern of *E.coli:*
July - Dec 2013 and Jan - June 2014



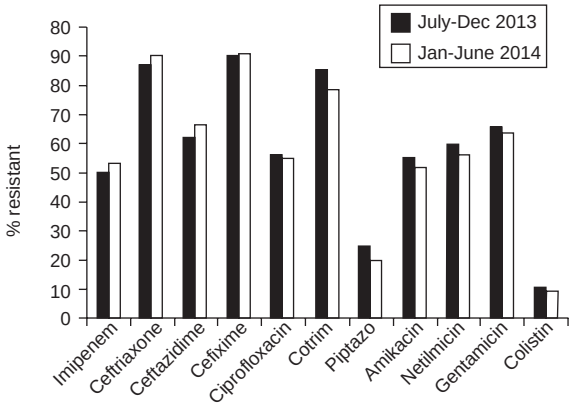
Comparative antibiotic resistance pattern of *Klebsiella:*
July - Dec 2013 and Jan - June 2014



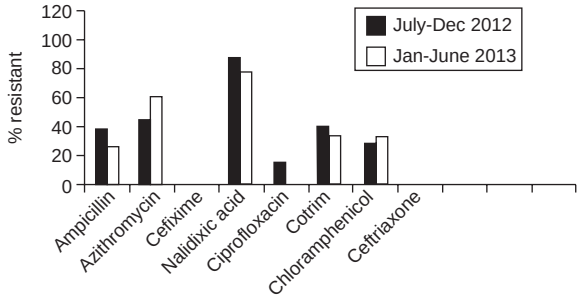
Comparative antibiotic resistance pattern of *Acinetobacter:*
July - Dec 2013 and Jan - June 2014



Comparative antibiotic resistance pattern of *Pseudomonas:*
July - Dec 2013 and Jan - June 2014



Comparative antibiotic resistance pattern of *Salmonella:*
July - Dec 2013 and Jan - June 2014



Note: All isolated Salmonella were sensitive to Ceftriaxone

(Birdem Med J 2015; 5(1):61)

Academic Achievements

The following doctors have completed post graduation in July 2014.

Name	Degree	Department
Dr. Tufayel Ahmed Chowdhury	FCPS (Medicine)	Registrar (In-charge) Nephrology
Dr. Nasim Zahan	FCPS (Psychiatry)	SMO, OPD
Dr. Sayeeda Pervin	FCPS (Gynae)	MS (Thesis) Part Student
Dr. Amrita Lal Halder	FCPS (Paediatric)	MO, Paediatrics